WHAT IS CLAIMED IS:

1. A method for manufacturing an optical fiber preform using MCVD (Modified Chemical Vapor Deposition), comprising:

a deposition process for depositing soot particles on an inner wall of a hollow tube; and

a dehydration process for eliminating hydroxyl groups from the inner wall of the tube by supplying dehydration gas into the tube on which the soot particles have been deposited,

wherein the dehydration gas supplied in the dehydration process is preheated at a temperature of 600 to 1200°C so that a temperature in the tube is kept above 500°C.

2. A method for manufacturing an optical fiber preform using MCVD according to claim 1,

wherein the dehydration gas is preheated at a position near a front end of the tube where the dehydration gas is introduced into the tube.

3. A method for manufacturing an optical fiber preform using MCVD according to claim 1,

wherein the dehydration gas is preheated at a position on a gas supply line before the dehydration gas is supplied to the tube.

4. A method for manufacturing an optical fiber preform using MCVD according to claim 1,

wherein the dehydration gas is preheated at a position in a pillow of a lathe to

which the tube is rotatably installed and in which a gas path of the dehydration gas supplied from an external gas supply line to the tube is formed.

5. A method for manufacturing an optical fiber preform using MCVD according to claim 1,

wherein the dehydration gas is preheated with the use of a preheater capable of controlling thermal capacity.

6. A method for manufacturing an optical fiber preform using MCVD according to claim 5,

wherein a heatproof plate is installed near the preheater so as to protect environmental instruments from heat of the preheater.

7. A method for manufacturing an optical fiber preform using MCVD, comprising the step of:

heating a tube with the use of a torch which moves along the tube with introducing a predetermined gas into the tube rotatably installed between a main pillow and an end pillow of a lathe,

wherein the predetermined gas supplied into the tube is preheated at a temperature identical to or lower than a heating temperature of the moving torch.

8. A method for manufacturing an optical fiber preform using MCVD according to claim 7,

wherein the heating step is a deposition process for depositing soot particles on an inner wall of the tube by introducing reaction gas into the tube,

wherein the reaction gas is preheated before being introduced into the tube so as to keep a temperature in the tube over 500°C.

9. A method for manufacturing an optical fiber preform using MCVD according to claim 7,

wherein the heating step is a sintering process for sintering soot particles deposited on an inner wall of the tube,

wherein preheated dehydration gas is supplied into the tube so as to keep a temperature in the tube over 500°C.

10. A method for manufacturing an optical fiber preform using MCVD according to claim 7,

wherein the gas supplied into the tube is preheated at a position near a front end of the tube where the gas is introduced into the tube.

11. A method for manufacturing an optical fiber preform using MCVD according to claim 10,

wherein the gas is preheated with the use of a preheater capable of controlling thermal capacity.

12. A method for manufacturing an optical fiber preform using MCVD according to claim 11,

wherein a heatproof plate is installed near the preheater so as to protect environmental instruments from heat of the preheater.

13. A method for manufacturing an optical fiber preform using MCVD according to claim 7,

wherein the gas supplied into the tube is preheated at a position on a gas supply line for supplying the gas into the tube.

14. A method for manufacturing an optical fiber preform using MCVD according to claim 13,

wherein the gas is preheated with the use of a preheater, and the preheater is capable of controlling thermal capacity.

15. A method for manufacturing an optical fiber preform using MCVD according to claim 14,

wherein a heatproof plate is installed near the preheater so as to protect environmental instruments from heat of the preheater.

16. A method for manufacturing an optical fiber preform using MCVD according to claim 7,

wherein the gas supplied into the tube is preheated at a predetermined position in the main pillow of the lathe to which the tube is rotatably installed and in which a gas path of the gas supplied from an external gas supply line to the tube is formed.

17. A method for manufacturing an optical fiber preform using MCVD according to claim 16,

wherein the gas supplied into the tube is preheated with the use of a preheater, and the preheater is capable of controlling thermal capacity.

18. An apparatus for manufacturing an optical fiber preform using MCVD, comprising:

a lathe;

main and end pillows installed to the lathe with a predetermined space for supporting a hollow tube rotatably therebetween;

a torch for heating the tube below the tube with reciprocating from one end to the other end of the tube;

a gas supply line installed to the main pillow and communicated with the tube through the main pillow for introducing gas into the tube from outside;

a gas discharge line installed to the end pillow for discharging gas in the tube outward; and

a preheater for preheating the gas to be supplied into the tube.

19. An apparatus for manufacturing an optical fiber preform using MCVD according to claim 18,

wherein the preheater is installed at a position near the front end of the tube where the gas is introduced into the tube.

20. An apparatus for manufacturing an optical fiber preform using MCVD according to claim 19,

wherein a heatproof plate is installed between the preheater and the main pillow so as to protect the main pillow from heat of the preheater.

21. An apparatus for manufacturing an optical fiber preform using MCVD

according to claim 18,

wherein the preheater is installed at a predetermined position on the gas supply line.

22. An apparatus for manufacturing an optical fiber preform using MCVD according to claim 21,

wherein a heatproof plate is installed between the preheater and the main pillow so as to protect the main pillow from heat of the preheater.

23. An apparatus for manufacturing an optical fiber preform using MCVD according to claim 18,

wherein the preheater is installed on a gas path inside the main pillow.

24. An apparatus for manufacturing an optical fiber preform using MCVD according to claim 23,

wherein the gas path inside the main pillow is made of heat-resistant material.

25. An apparatus for manufacturing an optical fiber preform using MCVD according to claim 18,

wherein the preheater is capable of controlling thermal capacity.